

Hello everybody,

WHAT: Workshop on EIC Detector R&D Simulations

WHEN: Thursday/Friday October 11th and 12th, 2012

WHERE: Brookhaven National Laboratory, Building 515, ITD Seminar Room;

EVO-Meeting : Info can be found here

<https://wiki.bnl.gov/eic/upload/Evo.meeting.pdf>

The purpose of the workshop is to combine forces in tools and manpower to answer questions put forward by the EIC Detector R&D Committee (https://wiki.bnl.gov/conferences/index.php/EIC_R%25D [wiki.bnl.gov]) on the influence of

machine induced backgrounds on detector technologies and the simulation of physics processes to benchmark the detector performance. Ideally, we would hope to formulate a mock detector featuring each of the technologies currently receiving R&D funding support with principle input to the simulation from the appropriate group(s). More details on the topics to be addressed during the meeting are listed below.

We would be very happy if you could find the time to join us for the workshop. If you have not yet access to BNL, information on how to get access and how to travel to BNL can be found here <http://www.bnl.gov/bnlweb/userindex.asp> please fill the guest registration (<https://www.bnl.gov/gateaccess/> [www.bnl.gov]) and please drop an email to Rachel Inguanta <irachel@bnl.gov> and Elke-Caroline Aschenauer?(<elke@bnl.gov>), if you are planning to attend.

The topics discussed during the workshop are mainly based on questions the committee asked several times.

- Golden measurements to benchmark the detector performance against currently we have
 - Structure functions F_L , F_2
 - DVCS
 - kaon asymmetries
 - Quality on how well the scattered lepton can be reconstructed
 - can we define software standards for the simulation of the detector
 - what computing power is currently existing and how does it need to be expanded at BNL/RACF and JLab.
 - what software tools and environment is existing at BNL and JLab for
 - ep/ea generators
 - detector simulations
 - to simulate forward particle trajectories through IR magnets
 - what machine background information is available from eRHIC and ELIC/MEIC for
 - neutrons
 - synchrotron radiation
 - electron and hadron beam induced background, i.e. beam gas events
- How can the info be integrated into the detector simulation

Please contact us if you think a critical topic is missing. The program and more information can be found with time at https://wiki.bnl.gov/conferences/index.php/EIC_RD_Simulation

Greetings

Elke Aschenauer, Klaus Dehmelt, Tom Hemmick, and Craig Woody